# **GEOLOGY (GEOL)**

### GEOL 010 Physical Geology 3 Units

Students are introduced to geologic processes related to volcanoes, earthquakes, landslides, erosion, tsunami, and Earth resources. The relationship of these processes to each other and to overarching geologic concepts, such as plate tectonics, the rock cycle and the water cycle will be examined. Major focuses include communicating scientific concepts and the impact these processes have on civilization. The scientific method is illustrated as it relates to analyzing geologic problems. Field trips may be required. (C-ID GEOL 100)

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: B1 IGETC: 5A District GE: B1

#### GEOL 010L Physical Geology Laboratory 1 Unit

Students will study minerals, rocks, and sediments and the processes that form them. These and other geologic processes will be related to plate tectonics, the rock cycle and the water cycle. A major focus is on using the scientific method to study these geologic processes and concepts. Projects will include using technology to conduct experiments that model geologic processes, interpreting maps and other images, and studying geologic processes in the field. Field trips may be required. (C-ID GEOL 100L)

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L Corequisite: GEOL 010 previous or concurrent Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: B3 IGETC: 5C District GE: B3

## GEOL 015 Earth Science 3 Units

Students survey the major fields of earth science including geology, astronomy, oceanography and meteorology. Plate tectonics, the lives of stars, earthquakes, tides, and extreme weather will be covered. The relationship of these processes to each other and to overarching earth science concepts, such as the rock cycle, the water cycle, and the evolution of the universe will be examined. Major focuses include communicating scientific concepts and the impact these processes have on civilization. The scientific method is illustrated as it relates to analyzing earth science problems. Field trips may be required. (C-ID GEOL 120)

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: B1 IGETC: 5A District GE: B1

#### GEOL 015L Earth Science Laboratory 1 Unit

Students will study the highlights of geology, astronomy, oceanography, and meteorology. Students will perform laboratory experiments and modeling activities covering topics such as plate tectonics, the lives of stars, earthquakes, tides and extreme weather. Students will examine the relationship of these processes to each other and to overarching earth science concepts such as the rock and water cycles, ocean currents, weather patterns, and the solar system. A major focus is on using the scientific method to study these processes and concepts. Field trips may be required. (C-ID GEOL 120L)

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L Corequisite: GEOL 015 previous or concurrent Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: B3 IGETC: 5C District GE: B3

## GEOL 098 Directed Study 0.5-9 Units

Individual or small groups of students, with previous course work in the discipline, who would benefit from Independent Study under the direction of faculty members in specific or related disciplines, may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the numbers of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None Lab Hours: 2.07 Repeatable: Yes Grading: L Prerequisite: GEOL 010 with C or better Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None